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September 23, 2004

Mr. Noboru Otsuka

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RE: Petition-To-Make-Special Search
For: **DATABASE SYSTEM INCLUDING CENTER
SERVER AND LOCAL SERVERS**
Your Ref. No.: 340201091US01
Our Ref. No.: HIT 1124

Dear Mr. Otsuka:

We have completed the petition-to-make-special search at the U.S. Patent and Trademark Office regarding the above-identified invention. The field of search covered Class 707, subclasses 102 (U.S. & Foreign), 200 (U.S. & Foreign), 201 (U.S. & Foreign) and 203 (U.S. & Foreign). Additionally, a computer database search was conducted on the USPTO systems EAST and WEST as well as database searching for foreign and non-patent literature. Examiner Hanh Thai in Class 707 (Art Unit 2171) was consulted in confirming the field of search.

The search was directed towards a database system including center server and local servers. In particular, the search was directed towards claims 1-18 of U.S Patent Application Number 10/634993. The claims describe a database system comprising a center server, a single or plurality of local servers, a first network for mutually connecting the center server and the local servers, a local storage subsystems for storing local databases managed by the local servers, a center storage subsystem for storing replications of the local databases, a second network for mutually connecting the center server, the center storage subsystem, the local server and the local storage subsystem, the server including a replication requesting unit for requesting the local servers to replicate local databases and a data consolidating the replicated local databases, and each of the local servers including a local database freeze requesting unit responsive to a database replication request from the center server to request a database management system to freeze the local database and a database replicating unit for causing the local storage subsystem to replicate, in the center storage subsystem, local database and the local storage subsystem stores; method for accessing a database system comprising a center server, a single or

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plurality of local servers, a first network for mutually connecting the center server and the local servers, local storage subsystems for storing local databases managed by the local servers and a second network for mutually connecting the center server, the center storage subsystems, the local servers and the local storage subsystems, the center server requesting local server to replicate local databases and performs a process of consolidating the replicated local databases, and each of the local servers responding to a database replication request from the center server to request a database management system to freeze the local database and cause the local storage subsystem to replicate, in the center storage subsystem and the local database the local storage subsystem store and as further claimed in the disclosure and in US Published Application Number 2004/0098417.

Please note the enclosed documents listed in numerical order for convenience:

U.S. Patent Number

5,757,669
5,974,135
6,263,053
6,792,436

Inventor(s)

Christie et al.
Breneman et al.
Kuftedjian et al.
Zhu et al.

Published Patent Application

2001/0056554
2002/0042818
2002/0143791
2003/0009707
2003/0149709
2003/0217077
2004/0054684
2004/0139235

Inventor(s)

Chrabaszcz
Helmer et al.
Levanon et al.
Pedone et al.
Banks
Schwartz et al.
Geels
Rashid et al.

Brief Description Of The Documents:

U.S. Patent Number 5,757,669 (Christie et al.) shows a method and apparatus for workgroup information replication. It further shows a central file server or shared hard disk that is also used to store workgroup application files (e.g., the local copy of each replicated database, or replica (see col.3, ln 20+).

U.S. Patent Number 5,974,135 (Breneman et al.) shows a local database that can be replicated from a server to the workstation at a request, and having the copy of the replication at the local network (see col. 6, ln. 39-45).



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U.S. Patent Application Publication Number 2002/0143791(Levanon et al.) shows content deployment system, method and network, having a central management system and local servers. It further shows a central server that takes the necessary steps to replicate data to a local system (see paragraph 0087).

U.S. Patent Application Publication Number 2003/0009707 (Pedone et al.) shows an intra-data center replication (i.e., local-area replication) or inter-data center replication (i.e., wide-area replication) capabilities (see paragraph 0003).

U.S. Patent Application Publication Number 2003/0149709 (Banks) shows a consolidation of replicated data, having plurality of additional data processing units, having access to a local replica of data resources for performing updates to their respective local replicas, means for consolidating and a server data processing system (see paragraph 0030).

U.S. Patent Application Publication Number 2003/0217077 (Swartz et al.) shows a method including storing updateable user data across a plurality of the application servers, wherein each application server manages an associated local storage device on which resides a local file system for storage of the user data ; receiving a point-in-time copy request from a client; freezing the local file systems of the plurality of clustered application servers and unfreezing the local file systems of the plurality of clustered application server (see paragraph 004).

U.S. Patent Application Publication Number 2004/0054684 (Geels) shows a local server connected via a communications network, to a central server with a central database which may be connected to a plurality of other local sites. It further shows updates performed by standard replication mechanisms of the database system used with access to the management of adapted method possible from one of the local workstations (P.0076).

U.S. Patent Application Publication Number 2004/0139235 (Rashid et al.) shows a system and method for synchronizing data between a device and a remote computer or server connected to a centralized database.

U.S. Patent Numbers 6,263,053 (Kuftedjian et al.); 6,792,436 (Zhu et al.) and Published Application Numbers 2001/0056554 (Chrabaszcz) and 2002/0042818 (Helmer et al.) show database systems including central server and local servers.



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While the above-noted Examiner was consulted and confirmed our opinion that the most relevant areas for this invention were reviewed, further searching may uncover additional patents. NOTE: The field of search included the most pertinent areas identified by the Examiner and our office as containing relevant patents.

Enclosed are copies of the cited documents and our invoice for services rendered and disbursements for this matter. Publication Number JP2002-330731 provided with the search request has not been included in this search report.

As always, if you have any questions regarding this search, please do not hesitate to call us at (703) 413-5000.

Very truly yours,

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